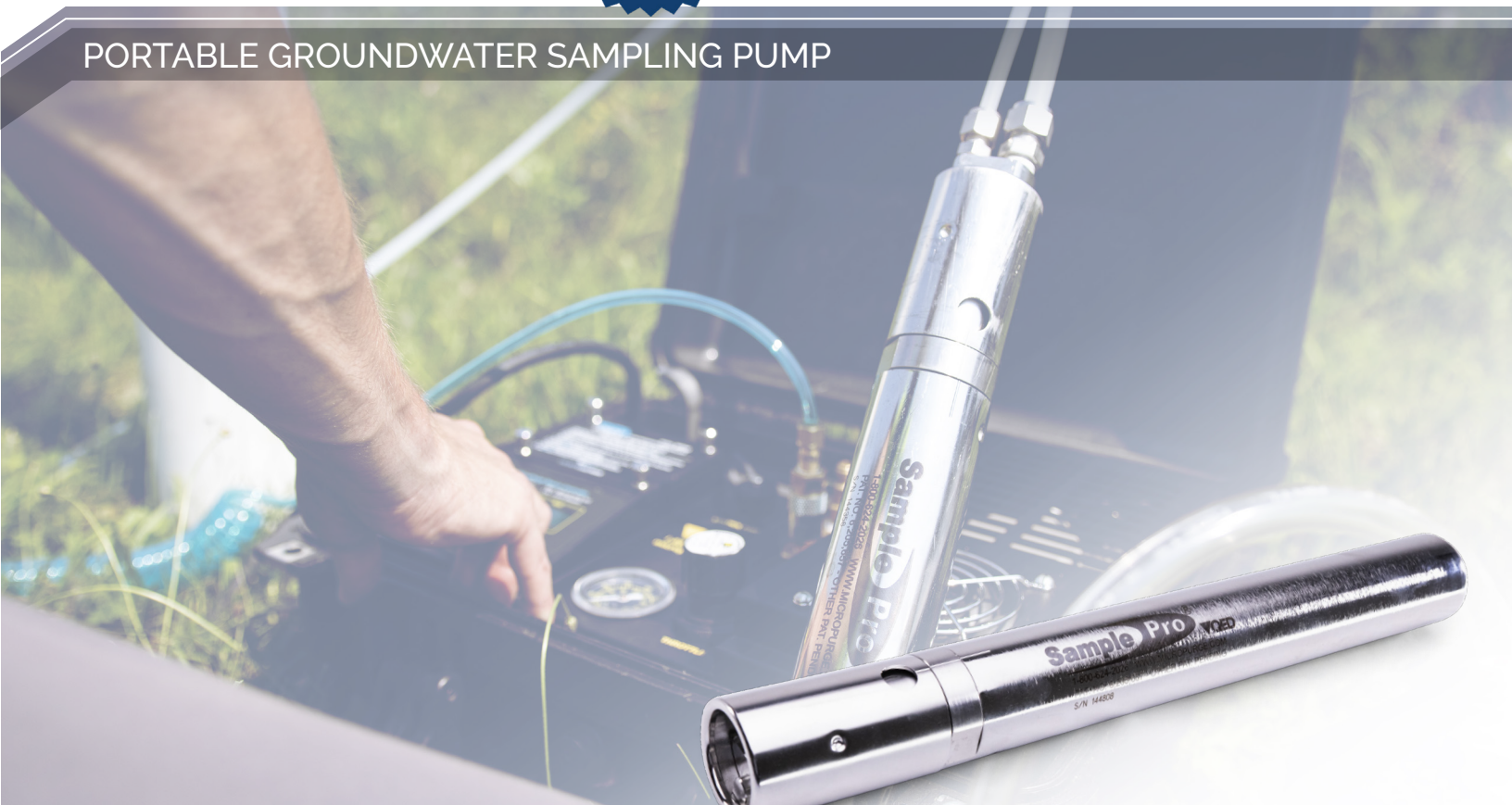




SAMPLE PRO®XD



PORTABLE GROUNDWATER SAMPLING PUMP



THE MOST RELIABLE PORTABLE SAMPLING PUMP IS PFAS-FREE

The **Sample Pro®XD** Portable Pump, the first pump developed specifically to bring the advantages of low-flow sampling to sites requiring portable pumps, has been shown to be PFAS-Free. Sample analysis by an independent laboratory showed no detections for 24 different per-and polyfluoroalkyl compounds at reporting limits much lower than the US EPA Health Advisory of 70 nanograms per liter (parts per trillion)*.

The Sample Pro®XD portable pump combines the unparalleled sample accuracy and high reliability of a bladder pump in an easy-to-use design. It runs cool and can run dry without damage, and can be operated using any of QED's Micro Purge® controller options - 12-volt integral compressor, a Honda-powered gasoline-driven compressor, an external compressed air cylinder, or a lightweight backpack with integral CO2 cylinder. The Sample Pro®XD pump's reliability and low maintenance make it more economical to use. Its twist-open design makes it easy to change the disposable bladder in seconds. The compact 14.75" length fits in a bucket for easy cleaning between uses. Other innovations include interchangeable tubing connection options - conventional compression fittings or a "push to lock" head that eliminates fittings, perfect for use with disposable tubing. The Sample Pro®XD pump's rugged, all-stainless construction will stand up to tough portable use. With thousands in service and nearly two decades of proven performance, the Sample Pro®XD pump is the most reliable portable sampling pump ever made.

FEATURES

- **Ideal for PFAS sampling** - tested for purity
- **Easy to disassemble** without tools
- **Twist-open design** with disposable bladders for fast and easy cleaning between wells
- **Nearly unbreakable** stainless steel construction stands up to tough use

© Product designs and specifications are subject to change without notice. User is responsible for determining suitability of product.

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SAMPLE PRO®XD

TESTING OF QED SAMPLE PRO XD FOR PER-AND POLYFLUROALKYL SUBSTANCES

Introduction

Per-and Polyfluoroalkyl substances (or PFAS) have been identified as an emerging contaminant in ground water. Site owners and their environmental consultants are being tasked with sampling for the presence of these chemicals at extremely low concentration levels, down to several parts per trillion (or nanograms per liter). As part of this sampling, concerns have been raised that any sampling equipment that contains fluoropolymers of polytetrafluoroethylene (e.g., Teflon®, such as PTFE, FEP and PFA) and fluoropolymer elastomers (e.g., Viton® or FKM) could leach PFAS into ground water samples. This has already led some users to exclude the use of any sampling equipment containing fluoropolymers or fluoroelastomers when sampling for PFAS. QED conducted a test of the Sample Pro® 1.75" Portable Bladder Pump to determine if any PFAS would leach from materials in the pump. The pump was tested as a complete assembly, and the LDPE bladders were also tested separately.

Test Method and Results

The Sample Pro 1.75-inch portable bladder pump was tested as a complete assembly (stainless steel pump body, housing and check balls, polyethylene bladder and Viton O-rings). The test was conducted by soaking for 24 hours in a stainless steel test fixture (5 gallons / 20 liters volume) and collecting samples from the stand tube. The samples were analyzed for 24 different PFAS compounds using US EPA Method 537M, with method detection limits below 1 ng/L and reporting limits of 5 ng/L for most PFAS. In addition, QED also tested all of our twin-bonded tubing materials – polyethylene (PE), Teflon-lined PE, all Teflon tubing and our Sample Pro LDPE bladders – by soaking each material for 48-72 hours directly in sample bottles. The results for the Sample Pro pump and all three tubing materials were non-detect for all 24 PFAS compounds at the laboratory reporting limits (RLs). Based on this, our Sample Pro pump, tubing and bladders should not contribute any PFAS to ground water samples taken with these products.

*Teflon® is a registered trademark of E. I. du Pont de Nemours and Company or its affiliates. It is used herein to describe a range of various fluorocarbon plastic resin formulations.

TECHNICAL SPECIFICATION

MATERIALS	
Body, Inlet and Discharge Housing, Check Balls	Stainless Steel
Bladder	Polyethylene (LDPE)
O-Rings*	Viton ® Standard, EPDM optional
DIMENSIONS	
Diameter	1.75 in. (44.5 mm)
Length	14.75 in. (37.5 cm) w/ Push-In Fittings 16.5 in. (41.9 cm) w/ Compression Fittings 12.12 in. (30.8 cm) Bottom of pump to centerline of inlet
Weight	4.25 lbs. (1.93 kg)
FITTINGS (Stainless Steel Compression or Push-In Type)	
Air	1/4 in. (6.4 mm) OD x 3/16 in. (4.3 mm) ID
Discharge	3/8 in. (9.5 mm) OD x 1/4 in. (6.4 mm) ID or 1/4 in. (6.4 mm) OD x 3/16 (4.3 mm) ID
Maximum Lift	300 ft. (91 m) (1/4" discharge line only) 250ft. (76.2 m) (3/8" discharge line only)
Flow Rates	3/8 in. OD Discharge Tubing, 10 ft. submergence: 1.3 LPM @ 25 feet 0.65 LPM @ 100 feet 1/4 in. OD Discharge Tubing, 10 ft. submergence: 0.9 Lpm @ 25 ft. 0.4 Lpm @ 100 ft.
Pump Volume	100 mL / 0.100 L / 0.26 gal. / 3.34 oz.

Sampling Consultant's Kit

The Sample Pro Consultant's Kit includes accessories and supplies in a rugged case that also carries and protects the pump. The kit includes all supplies, accessories, and replacement parts necessary to sample 10 wells, packed in a 9x9x20" heavy-duty structural foam tool box for easy portability on-site.



* For applications where materials specifications prohibit the use of Viton O-rings, QED has EPDM O-ring kits for the Sample Pro®XD portable bladder pump. The kit contains 10 complete sets of O-rings, and can be ordered using Part Number 38362-B.

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